REMARKS

There remains pending in this application claims 1-6, 16 and 17, of which claim 1 is independent. No claims have been added or cancelled.

In view of the above amendments and the following remarks, favorable reconsideration together with entry of those amendments and allowance of the above application is respectfully sought.

The invention as set forth now in independent claim 1 is directed to a sheet stacking apparatus which comprises a first tray and a second tray. The first tray is the one onto which sheets are discharged from an outlet are stacked and which is movable between a stacking position at which the sheets discharged from the outlet are stacked and a first retracted position above the outlet. The second tray is one on which the sheets discharged from the outlet are stacked, is disposed below the first tray, and is movable between a stacking position at which the sheets discharged from the outlet are stacked and a second retracted position below the stacking position. A controller controls movement of the first tray and the second tray independently of each other and is characterized in that when the sheets are to be stacked onto the first tray, the controller stops descending movement of the second tray when a moving distance of the second tray from the stacking position reaches a predetermined constant distance which is set so that the top surface of the sheets stacked on the second tray does not interfere with the first tray which is in the stacking position.

Claims 1-4, 6, 16and17 are rejected under 35 U.S.C. § 102(a) as being anticipated by Yamada et al. (U.S. Patent No. 6,494,453). In view of the above amendments and the following remarks, the rejection is respectfully traversed.

Yamada et al. has been discussed in the prior amendment and that discussion is incorporated herein. In Yamada et al., the finishing apparatus 200 detects that the ejection tray 2 has come to a lower limit position by means of a sensor SN8 for detecting a position of the uppermost sheet placed on the ejection tray 2. While the sensor SN8 is mounted at a predetermined position near the lower standby position, it generates a detection signal depending on a condition of the sheet. For example, when the stacked sheet has curled, the sensor generates a detection signal at an appropriate time, namely, a deferred time. Accordingly, in the finishing apparatus, the ejection tray cannot stop at a predetermined constant position. That is, the moving distance of the ejection tray is not constant.

In the outstanding Official Action, Applicants' prior amendments were rejected primarily on grounds that the controller of Yamada, et al. allegedly stops the second tray at a predetermined constant distance which is set so that the top surface of the sheets stacked on the second tray do not interfere with the first tray. More specifically, the predetermined constant distance referred to therein is asserted to be a distance from sensor SN8 to outlet E2. Applicants respectfully disagree.

The sensor SN8 referred to in Yamada, et al. is for sensing the top surface of the recording sheets placed on the ejection tray 2 to stop the ejection tray 2. (See, column 15, lines 42-51). In the finishing apparatus of Yamada, et al., when the ejection tray 2 on which the sheets are stacked is moved down, there is the possibility that the sheets stacked on the ejection tray 2 lean on the end fence 3 due to the friction of the sheets against the end fence 3, so that the sensor SN8 detects a top surface being in an incorrect sheet position to thereby stop the ejection tray 2.

Thus, the ejection tray 2 stops at a lower position than the correct position, and it therefore takes too long to stop the descending movement.

Applicants' invention addresses the problem such as disclosed in Yamada, et al. More specifically, the invention as featured in claim1 is arranged so that when the sheets are to be stacked on the first tray, the descending movement of the second tray, which is disposed below the first tray, is stopped when a moving distance of the second tray reaches a predetermined constant distance. With this arrangement, the present invention can maintain the correct sheet position required for the second tray at stand by when the sheets are stacked on the first tray, and the descending movement of the second tray can be securely completed within a predetermined time period set. That is, the present invention clearly distinguishes from Yamada, et al. in that the descending movement of the second tray, which is disposed below the first tray, is not stopped when the sheet surface sensor detects the top surface of the sheet stacked on the second tray, but when the moving distance of the second tray reaches the predetermined constant distance.

Applicants therefore respectfully submit that at least independent claim 1 of the above application is patentable over Yamada, et al.

The secondary reference to Borostyan was applied against claim 5 and it features a controller 96 which senses when the sets of copy of sheets have been removed and when raised to stacker tray 106 to the highest position. However, this patent merely mentions a control for keeping at a constant position a top surface position of the stacker tray 106 where stacked sheets in relation to the ejection position, when the stacker tray is at a stacking position. It does not teach or suggest control at a time of changing-over between a first tray and the second tray as in

the present invention. Thus, the citation of Borostyan does not meet or satisfy the shortcomings of Yamada, et al.

For the foregoing reasons, Applicants respectfully submit that independent claim 1 is patentable over the applied art of record.

The remaining claims of the above application depend from claim 1 and are therefore patentable over the art of record for reasons noted above with respect to claim 1. In addition, each recite features of the invention still further distinguishing it from the applied art. Favorable and independent consideration thereof is respectfully sought.

Applicants respectfully submit that all outstanding matters in the above application have been addressed and that this application is in condition for allowance. Favorable reconsideration and early passage to issue of the above application are respectfully sought.

Applicants respectfully request entry of this amendment after final as they are being presented in an earnest effort to advance prosecution and improve upon the clarity of the claims. These amendments were not earlier presented as Applicant was previously of the belief that the claims on file were allowable over the applied art. Accordingly, favorable consideration together with entry of the above amendments and early passage to issue of the above application is respectfully sought.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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